(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 1 July 2004 (01.07.2004)

(10) International Publication Number WO 2004/055181 A1

(51) International Patent Classification7: C12Q 1/25, A01K 67/00

C12N 15/00,

(21) International Application Number:

PCT/AU2003/001676

(22) International Filing Date:

16 December 2003 (16.12.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2002953393 2003906285

16 December 2002 (16.12.2002) AU

14 November 2003 (14.11.2003)

- (71) Applicant (for all designated States except US): GARVAN INSTITUTE OF MEDICAL RESEARCH [AU/AU]; C/-St Vincent's Hospital, 384 Victoria Street, Darlinghurst, New South Wales 2010 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MOLERO, Juan, Carlos [ES/AU]; 18/3 Bortfield Drive, Chiswick, New South Wales 2046 (AU). JAMES, David [AU/AU]; 25 Cutler Road, CLONTARF, New South Wales 2093 (AU).

- (74) Agent: F B RICE & CO.; 139-141 Rathdowne Street, Carlton, Victoria 3053 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU. SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS OF TREATMENT OF FEEDING DISORDERS OR DISORDERS OF GLUCOSE UPTAKE AND FOR MODIFYING METABOLISM AND IDENTIFYING THERAPEUTIC REAGENTS THEREFOR

(57) Abstract: The present invention provides several assay formats for determining the effect of compounds on one or more metabolism-associated phenotypes in a cell, tissue or animal. The assay formats are based upon the finding that the proto-oncogene Cbl is involved in modulating basal glucose uptake, metabolic rate, adipogenesis, muscle thermogenesis, mitochondrial structure and function, the ratio of lean muscle mass to body fat and feeding behavior.